

Title (en)
RADIATION DETECTOR

Title (de)
STRAHLUNGSDETEKTOR

Title (fr)
DÉTECTEUR DE RAYONNEMENTS

Publication
EP 2180342 A1 20100428 (EN)

Application
EP 08835772 A 20080924

Priority
• JP 2008067193 W 20080924
• JP 2007257960 A 20071001

Abstract (en)
In an X-ray line sensor 1, a scintillator layer 24 that absorbs X-rays in a low-energy range and emits light and a scintillator layer 26 that absorbs X-rays in a high-energy range and emits light are brought in contact with each other, and further, the thickness of the scintillator layer 24 on the front side is thinner than that of the scintillator layer 26 on the rear side. These make the amount of mismatch small between a light emitting position P1 in the scintillator layer 24 and a light emitting position P2 in the scintillator layer 26 to X-rays in the low-energy range and X-rays in the high-energy range entered at the same angle from the front side, so that at this time, light emitted by the scintillator layer 24 and light emitted by the scintillator layer 26 are detected by a photo-detecting section 16 and a photo-detecting section 23 facing each other. Thus, mismatch between an X-ray transmission image in the low-energy range and an X-ray transmission image in the high-energy range obtained simultaneously can be prevented.

IPC 8 full level
G01T 1/20 (2006.01)

CPC (source: EP US)
G01N 23/04 (2013.01 - EP US); **G01T 1/2006** (2013.01 - US); **G01T 1/2008** (2013.01 - EP US)

Cited by
CN108139491A; CN103149225A; US10371830B2; WO2017067846A1; TWI447389B

Designated contracting state (EPC)
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Designated extension state (EPC)
AL BA MK RS

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EP 08835772 A 20080924; JP 2007257960 A 20071001; JP 2008067193 W 20080924; TW 97137556 A 20080930; US 201213682914 A 20121121; US 67221208 A 20080924